

Au-Ag-Cu nano-alloys: tailoring of permittivity

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SUPPLEMENTARY INFORMATION

Experimentally obtained all permittivity data

Figure Supplement shows permittivity spectra of pure metals and their binary and ternary alloys made in this study. All the data are plotted after the same analysis of experimental reflection and transmission measurements as shown in Figure 2. It is clearly discernable that real and imaginary parts of the alloys closely follow the same trend which signifies a good nanoscale alloying.

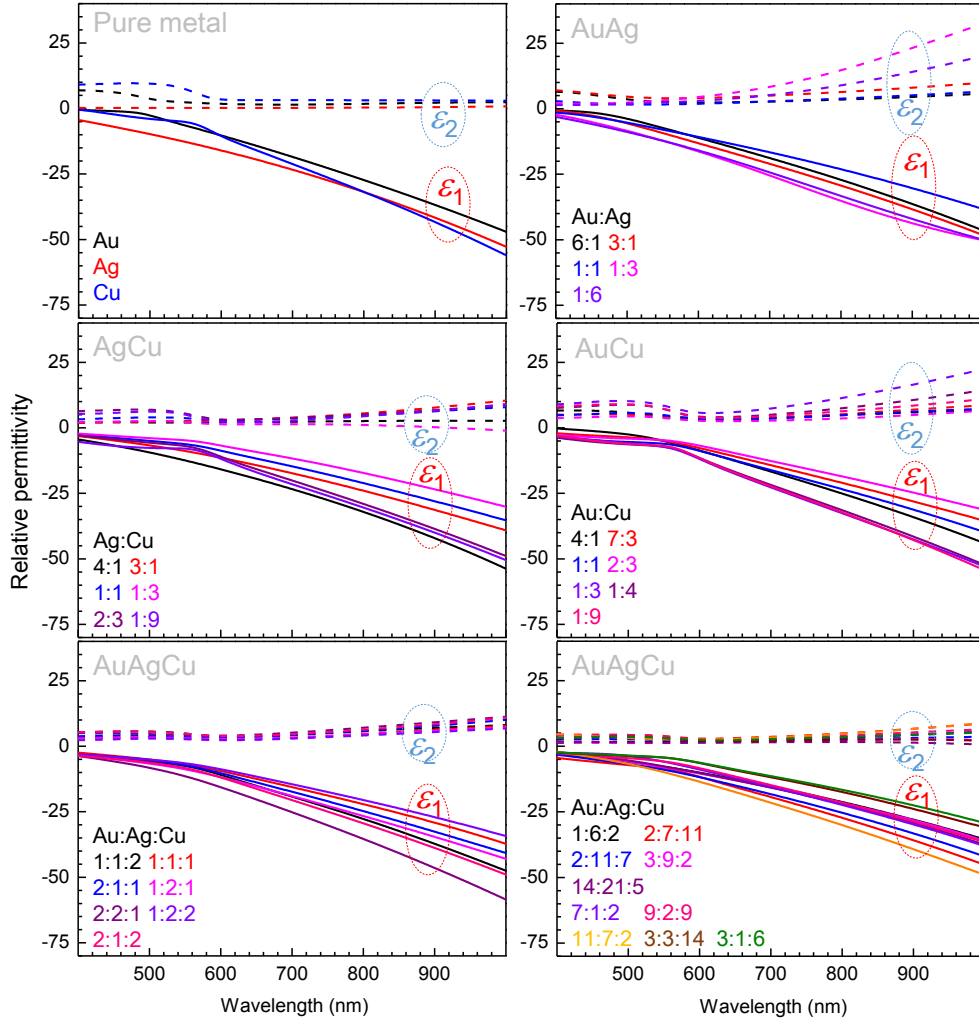


Figure Supplement. Spectra of the real, ϵ_1 , and imaginary, ϵ_2 , parts of the permittivity of pure metals, binary and ternary alloys at different mixing ratios (color coded) made by Drude-Lorentz analysis. All data analysis was done with $j = 15$ oscillators to achieve high fidelity $F > 0.9$ fits of the experimental reflection and transmission data (same as for Fig. 2 in the main text).